



# JOINT BOARD OF MANAGEMENT

Wednesday, June 21, 2023

9:00 AM

Unico Community Centre  
37 Beech Street Kingsville

## AGENDA

- A. **Call to Order:**
- B. **Disclosures of Pecuniary Interest:**
- C. **Approval of Minutes:**  
Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, May 17, 2023  
Pages 2 - 5
- D. **Business Arising Out of the Minutes**
- E. **Items for Consideration:**
  - 1. UW/13/23 dated June 16, 2023 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from May 12th to June 16, 2023  
Pages 6 - 10
  - 2. UW/14/23 dated June 16, 2023 re: Presentation by Associated Engineering on the UWSS Infrastructure Needs Study Report  
Page 11
- F. **New Business:**
- G. **Adjournment:**
- H. **Date of Next Meeting:** July 19<sup>th</sup>, 2023, location to be determined.

/kmj

# JOINT BOARD OF MANAGEMENT

Wednesday, May 17, 2023  
9:00 am

Unico Community Centre,  
37 Beech Street, Kingsville



## MINUTES

Members Present    Mayor MacDonald (Chair); Deputy Mayor Verbeke, Councillors  
Union Water        Abraham, Dunn, Tiessen & Wilkinson - Leamington  
Supply System      Mayor Rogers, Deputy Mayor DeYong (Vice Chair), Neufeld  
                              (alternate) & Patterson - Kingsville  
                              Mayor Bondy - Essex  
                              Deputy Mayor Walstedt - Lakeshore

Members absent    Councillor Gaffan - Kingsville

Also in Attendance: Rodney Bouchard, Union Water Supply System Manager  
For UWSS            Kristine Johnson, Recording Secretary

Municipal Staff    Shannon Belleau - Municipality of Leamington  
Present:            Andrew Plancke - Town of Kingsville  
                              Kevin Girard - Town of Essex  
                              Gary Punt - Municipality of Lakeshore

OCWA Staff        Ken Penney, Dave Jubenville  
Present:

**Call to Order:    9:04 am**

**Disclosure of Pecuniary Interest: none**

**Adoption of Board Minutes:**

**No. UW-23-23**

Moved by:            Councillor Dunn

Seconded by:        Deputy Mayor DeYong

That the minutes of the Union Water Supply System Joint Board of Management meeting held on April 19, 2023 is received.

Carried

## **Business Arising out of Minutes:**

There was none

### **Report UW/12/23 dated May 12, 203 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from April 14<sup>th</sup> to May 12<sup>th</sup>**

The Manager welcomes everyone and thanks them for coming to the change of venue. He reminds members that in March 2023 the DAF recirculation system was not working as the optimal design rate. He also reminds them of the plastic balls inside the DAF that had broken apart. He then updates them on the status of the repairs. He confirms that all of the plastic pieces have been removed and Napier Reid is sourcing new materials, at no cost to UWSS. He further notes that the system is not as efficient without the balls, but operations staff is still in the process of learning the new system. However, DAF is doing what it is supposed to be doing.

The Manager explains that four (4) new progressive cavity pumps for the powdered activated carbon (PAC) have been installed. This system is used during the warmer months as the taste of water can change. UWSS and operations staff are working with Aquatic Life through a six (6) month trial to use an analyzer that will provide data in real time. This instrument can optimize the system using raw water, DAF effluent and treated water, providing data in various testing parameters.

The North Lagoon Pond has been put back into service to handle the extra plant residuals/solids with the clarification process. There have been several high turbidity events this season so far.

A new Kaser compressor has been delivered to the Ruthven WTP. The compressor will assist with various pneumatic system within the WTP and better automate the system. Along, the same lines the annual flow meter verification and calibration has been completed on all of the billing meters. UWSS has retained Eramosa to bring new technology to the billing chambers so that real time data will be collected.

C3 Water and Stantec are continuing to work on the UWSS-Windsor Utilities Commission (WUC) emergency redundancy project. A group meeting was held to discuss the possible routes that the new system might take. The Manager notes that this team will most likely reach out to other local municipalities to involve everyone that might benefit from this project. He expects a preliminary report ready for June.

Associated Engineering (AE) is continuing to work on the Reservoir #3 design and are making progress as well. The geotechnical and hydrogeological investigations have been completed. The Manager expects to receive a technical memorandum as to the preferred size and location of the new reservoir shortly after this meeting.

The Manager updates the board on the Infrastructure Needs Study and notes that the team at AE is working on the final report and he expects this to be ready for the June meeting.

The Manager confirms that the UWSS is participating in a project “Detecting and treating per and polyfluoroalkyl substances (PFAS) in Canadian water systems”. He notes that UWSS’s obligations would include sampling, he further confirms that this project is fully funded and does not require a financial obligation on the part of the UWSS. This project could assist with possible treatment options and is ongoing for three (3) years.

The Manager explains that Attache Group has been retained to provide IT services as it moves to an independent corporation as part of the restructuring process.

The Manager reminds members that interconnects between UWSS and Essex had been opened in early March 2023 to support the Harrow Colchester Treatment Plant during their necessary repairs. He confirms that the interconnects have now been closed and staff is working to determine the amount of water provided to them.

Flows are still up over last year and the previous four (4) year average.

Councillor Neufeld asks for clarification regarding the DAF plastic balls and why these were chosen if not proven to work. The Manager notes that the design team has been surprised by their failure as they have worked elsewhere. He confirms that a different ball has been sourced.

Mayor MacDonald asks for clarification regarding the project between UWSS and WUC. She reiterates that the UWSS Board will not be making any decisions at the joint meeting between UWSS and WUC. The Manager confirms that during the joint meeting only the newest information will be presented, no large-scale decisions will need to be made. She feels UWSS needs to discuss and make important decision within the confines of its own board meeting times.

Mayor Rogers arrives at 9:22 am

Mayor MacDonald also notes that after the presentation all board members should consult with their respective municipalities’ staff members.

#### **No. UW-24-23**

Moved by: Councillor Patterson

Seconded by: Councillor Neufeld

That the report UW/12/23 dated May 12, 2023 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from April 14<sup>th</sup> to May 12<sup>th</sup>, 2023 is received.

Carried

#### **New Business:**

The Manager notes that starting in June the UWSS will be running two (2) board meetings. One meeting will be the regular 12 person Joint Board of Management and the second one will be the four (4) person Interim Board for the new UWSS Inc.

#### **Adjournment:**

No. UW-25-23

Moved by: Mayor Rogers

Seconded by: Deputy Mayor Walstedt

Time: 9:29 am

**Date of Next Meeting:** June 9<sup>th</sup>, 9 am for the Interim Board and June 21<sup>st</sup> 9 am for the Joint Board of Management - locations to follow

/kmj



## NOTICE OF STUDY COMMENCEMENT

# Municipal Class Environmental Assessment Study

To Provide Peaking Capacity for the Union Water Supply System

### THE STUDY

The Union Water Supply System (UWSS) is owned by the Towns of Kingsville and Essex, the Municipalities of Lakeshore and Leamington, and is managed by the UWSS Joint Board of Management. UWSS has initiated a Schedule C Municipal Class Environmental Assessment (Class EA) Study to provide additional peaking capacity for the water system. The results of a recently completed water infrastructure needs assessment identified water system capacity limitations that are constraining growth and development. As such, additional peaking capacity of the UWSS is recommended to meet current and projected water demands.

The purpose of the Class EA Study is to identify and evaluate alternative solutions to provide additional water system peaking capacity. One of the alternative solutions reviewed will include expansion of the existing Ruthven Water Treatment Plant (WTP) within the existing property limits (located at 1615 Union Avenue, Kingsville). Subsequently, the study will identify and evaluate alternative concepts for the preferred solution identified in the first phase of the study. The Class EA Study will follow a comprehensive, sound and open planning process to ensure the study objectives are met, and impacts to the protection of the environment, as well as public health and safety, are considered.

### THE PROCESS

This notice signals the commencement of the Municipal Class EA Study, a study which will define the problem, identify and evaluate alternative solutions, and subsequently identify and evaluate alternative concepts for this preferred solution in consultation with regulatory agencies, indigenous communities, members of the local business community, and the public.

The Class EA Study is being carried out in accordance with the planning and design process for Schedule C projects as outlined in the

*Municipal Class Environmental Assessment (October 2000, as amended in 2007, 2011, 2015, and 2023), which is approved under the Ontario Environmental Assessment Act.*

Consultation with stakeholders is a key component of the Study process and input will be sought throughout the Study. There will be two Public Consultation Centre (PCC) events. The first is anticipated to be held in early Fall 2023 and will share information about the alternative solutions. The second PCC will be held in Winter 2024 and will share information about the alternative concepts for the preferred solution to providing peaking capacity for the water system. Details regarding the upcoming PCCs will be advertised as the Study progresses. Upon completion of the study, an Environmental Study Report (ESR) will be prepared and made available for final public review and comment.

### COMMENTS INVITED

If you have any questions or comments regarding the Study, or wish to be added to the study mailing list, please contact either of the following Project Team members:

**Rodney Bouchard , P.Geo., General Manager**  
 Union Water Supply System  
 1615 Union Ave, P.O Box 340  
 Ruthven, ON N0P 2G0  
[rbouchard@unionwater.ca](mailto:rbouchard@unionwater.ca)

**Vincent Laplante, P. Eng., Project Manager**  
 Associated Engineering Ltd.  
 165 Commerce Valley Unit 200  
 Markham, ON L3T 7V8  
[laplantev@ae.ca](mailto:laplantev@ae.ca)

Comments received through the course of the Study will be considered and documented in the PFR. Additional information related to the Study and consultation process may be obtained through the website: [unionwater.ca/public-information](http://unionwater.ca/public-information)

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public records.

*This notice first issued on June 16, 2023*

To: Chair and Members of the Union Water Supply System Joint Board of Management

From: Rodney Bouchard, UWSS General Manager

Date: June 16, 2023

Re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from May 12 to June 16, 2023

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**Aim:**

To inform the UWSS Board about operational and maintenance activities and capital works projects for the Union Water Supply System since the last Board meeting on May 17, 2023.

**Discussion:**

The UWSS General Manager conducts regular meeting with OCWA Operations staff in regards to on-going operations and maintenance programs for the UWSS facilities. The following provides an update on UWSS operations, regular maintenance and major maintenance and Capital Works at UWSS facilities:

1. Two backflow devices that were identified as defective during the annual inspection on May 5th have been repaired by a certified contractor.
2. Kent Compressor was on-site on May 16, 2023 for annual service work on air compressors 1, 2 and 3. UWSS and OCWA maintenance staff have also requested a quote to install the recently purchased Kaiser compressor that will replace the old Ingersoll Rand compressor (compressor #2). This work will likely be completed in July 2023.
3. OCWA Union electrical maintenance staff installed new capacitors on High Lift pumps 8 & 9. This work was completed on May 16, 2023. The new capacitors have improved power factor correction for these pumps which will decrease electrical costs.
4. OCWA Union electrical maintenance staff completed the installation of Variable Frequency Drives (VFDs) for the 4 Cottam Booster Pumps. DTM Consulting services was retained on May 18<sup>th</sup> to conduct vibration testing on Cottam Booster pump #4 since a vibration was noted during the testing of the pump and VFDs. Testing indicated that the pump's thrust bearing needs to be replaced. OCWA Union maintenance staff have recommended that the pump be removed and rehabilitated based on its age, lack of historical use and the intent to use this pump regularly now that a VFD has been installed. Quotes for this work are being sought.
5. On May 25<sup>th</sup>, it was noted that the Un-interruptible Power Supply (UPS) for the Albuna Water Tower PLC had failed. The unit was replaced with a backup UPS.

6. On May 29<sup>th</sup>, the Low Lift Generator faulted out during the monthly test run and the generator overheated. Inspection indicated that parts were needed to repair the backup generator. The portable backup generator was brought from the treatment plant site to the low lift and connected to provide backup power if needed while the low lift back up generator was awaiting repair. This repaired generator was tested on June 7<sup>th</sup> with no issues identified.
7. On May 29<sup>th</sup>, the VFD for Clarifier #4 center mixer failed. This failure resulted in shutdown of clarifier #4. Phasor Electric of Kingsville was retained to replace the VFD. Clarifier #4 was returned to service within the day.
8. The new “media” for the DAF #1 air dissolution tank was received on May 31, 2023. This new media is ball shaped as opposed to the cube shaped older media. The ball shape should minimize breakage of the media. Further, the new media is made of more resilient plastic material than the old media. The design engineer, Napier-Reid, will be on site the week of June 26<sup>th</sup>, 2023 to help OCWA maintenance staff install the new media and to replace the temporary rapid mixer with the permanent mixer.
9. Four new progressive cavity pumps for the powdered activated carbon (PAC) injection system have been purchased from John Brooks Company Ltd and were installed the week of April 24<sup>th</sup>, 2023. These pumps were noticed to have failed on June 5<sup>th</sup>, 2023 and the old carbon pumps were reinstalled. Maintenance staff are working with the supplier to identify the reason for the failure and determine a course of action.
10. On June 12<sup>th</sup>, 2023 the interconnects between the UWSS supplied drinking water system and the Colchester-Harrow drinking water system were re-opened so that the Colchester treatment plant could undertake repairs on the their clarifier. It is anticipated that this work will be complete by June 19<sup>th</sup> and the interconnects will be closed at that time.
11. On June 16<sup>th</sup>, Nevro Pumps and Mechanical was on site to conduct vibration analysis on High Lift pump #6. The analysis indicates that a motor bearing needs to be replaced. This work will be completed sometime in mid to late July 2023.
12. C3 Water Inc. is making forward progress on the project to address the operational capacity and filling issues with the Albuna Water tower. A meeting was held on June 5<sup>th</sup>, 2023 with the project team to present results of data evaluation conducted as part of Phase 2 of the project, which included review of data from normal operating of the tower (included the recently installed smart hydrant devices). The Phase 3 portion of the field testing work will incorporate tests for partial increase in filling the tower, closing and opening valves in area of the tower, etc. to identify any issues.
13. The consulting team of C3 Water and Stantec Consulting is making forward progress with the conceptual design for an emergency water supply sharing

solution between UWSS and Windsor Utilities Commission (WUC). A project meeting is scheduled for July 5<sup>th</sup> to review draft Technical Memorandum #2 (TM#2) on Reservoir Locations, Sizing and Watermain Locations. The UWSS Board will be provided with a more detailed update following issuance of the final TM#2.

14. Associated Engineering (AE) is making forward progress on the conceptual and indicative design for the new proposed reservoir at the UWSS owned property adjacent to the water treatment plant. Revised options on Alternate Project Delivery Approach (TM #7), demolition plan (TM#6) were reviewed with UWSS. A recommendation report will be provided to the UWSS Board for the July 19, 2023 meeting in regards to Alternative Project Delivery Approach.
15. On June 16<sup>th</sup>, 2023, the UWSS released the Notice of Study Commencement Municipal Class Environmental Assessment Study to Provide Peaking Capacity for the Union Water Supply System". The retained consultant for the EA, Associated Engineering, has completed a number of tasks associated with the EA process. It is anticipated that the EA report will be completed in Winter 2024. A copy of the Notice of Study Commencement is attached to this report.

The first chart shows comparative flows for 2019 through 2022 in Mega Litres (ML) and the second chart shows Millions of Imperial Gallons (MIG) for the period January 1<sup>st</sup> to June 15<sup>th</sup>, 2023.

	2019	2020	2021	2022	2023
Flow to Date (ML)	6,577.83	7,684.15	8,754.90	8,531.97	9,411.25
Max Day (ML)	68.25	86.51	93.83	92.14	108.68
Min Day (ML)	20.13	25.44	26.74	27.58	32.48
Average Day (ML)	39.63	46.01	52.74	51.40	56.69
No of Days	166	167	166	166	166

	2019	2020	2021	2022	2023
Flow to Date (MG)	1,446.95	1,690.31	1,925.85	1,877.48	2,070.22
Max Day (MGD)	15.01	19.03	20.64	20.27	23.91
Min Day (MGD)	4.43	5.60	5.88	6.07	7.14
Average Day (MGD)	8.72	10.12	11.60	11.31	12.47
No of Days	166	167	166	166	166

Flows to date are up 879.28 ML (192.74 MIG) or 10.3% from last year. The 2023 flows to date are up 19.3% over the previous 4-year average.

**Recommendation:**

That this report be received by the UWSS Board for information purposes.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'R. Bouchard', with a stylized flourish at the end.

Rodney Bouchard, General Manager  
Union Water Supply System Joint Board of Management

/kmj

To: Chair and Members of the Union Water Supply  
System Joint Board of Management

From: Rodney Bouchard, UWSS General Manager

Date: June 16, 2023

Re: Presentation by Associated Engineering on the UWSS Infrastructure  
Needs Study Report

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**Recommendation:**

That the Union Water Supply Joint Board of Management (UWSS Board) receives the presentation by Associated Engineering for the UWSS Infrastructure Study Review Report report.

**Background:**

Associated Engineering was retained by UWSS in October 2020 to undertake a review of the UWSS infrastructure needs. The main goal for this study is to assess the capability of the UWSS drinking water system to meet the treated water demands of its municipal customers through to 2060 (20-year planning horizon), and to identify any necessary existing or future upgrades, as required. The focus of the study is as follows:

- Identify future system demand requirements considering historic consumption rates and climate change impacts;
- Assess current system operations and identifying opportunities for optimization;
- Provide solutions to address identified deficiencies, considering life cycle cost, and environmental and social impact.

**Discussion:**

On March 30<sup>th</sup>, 2023, UWSS received the draft report for the UWSS Infrastructure Needs Study that has been prepared by Associated Engineering (AE). Meetings and discussions were held in April and May with the AE project team to review the report findings and recommendations.

Associated Engineering project team is scheduled to provide a presentation to the UWSS Board at the June 21<sup>st</sup>, 2023 UWSS Board meeting, on the revised draft Infrastructure Needs Study report. The final report will be generated following the presentation of the updated draft report to the UWSS Board at the June 21<sup>st</sup>, 2023 UWSS Board meeting.

Respectfully submitted,



Rodney Bouchard, General Manager  
Union Water Supply System Joint Board of Management

/kmj